

*Abies*. Pedigree - Wild. Fruit small, 4.0 x 3.5 cm, greenish with yellow case. Flavor astringent, aromatic, flavorful. Fruit disease: scab. Tree height 12 m; spreading habit, horizontal branches; huge scaffold branches at wide angles; modified spur; one of the highest trees in the area, leaning towards slope.

**PI 600447. *Malus sieversii* (Ledeb.) M. Roem.**

Wild. GMAL 3550. Collected 09/12/1993 in Kazakhstan. Latitude 45 deg. 24' N. Longitude 80 deg. 24' E. Elevation 1285 m. Kazakhstan, Sarkand, Village of Topolevka, Forestry Camp #16 Topolevka Forestry Area, Taldy-Kurgan region, Soldier's Gorge, Dzhungarksy Alatau. Across valley, 70 m N, at base of S slope. Soil drier. Slope 10% south facing. Rainfall 750-800 mm. Population 100+. Surrounding plants *Crataegus*, *Prunus*. Pedigree - Wild. Fruit large, 3.8 x 4.0 cm, yellow. Flavor good balance, aromatic, acidic, juicy, nice flavor. Fruit disease: scab. Leaf shape: roundish, healthy. Leaf disease: few scab, maybe resistance reaction to scab. Tree height 10 m; multiple trunks.

**PI 600448. *Malus kirghisorum* Al. Fed. & Fed.**

Wild. GMAL 3551. Collected 09/12/1993 in Kazakhstan. Latitude 45 deg. 24' N. Longitude 80 deg. 24' E. Elevation 1285 m. Kazakhstan, Sarkand, Village of Topolevka, Forestry Camp #16 Topolevka Forestry Area, Taldy-Kurgan region, Soldier's Gorge, Dzhungarksy Alatau, on the way back to camp. Soil wet. Rainfall 750-800 mm. Population large. Surrounding plants *Rhamnus*, Box elder. Pedigree - Wild. Fruit large, 4.7 x 4.7 cm, large carpels, red strips with yellow background. Flavor aromatic, acidic, dry, nice flavor. Fruit disease: scab+. Leaf shape: healthy. Leaf disease: scab. Insect: spider mite++. Tree height 9 m; spreading habit; spur type; multiple trunks.

**PI 600449. *Malus kirghisorum* Al. Fed. & Fed.**

Wild. GMAL 3552. Collected 09/12/1993 in Kazakhstan. Latitude 45 deg. 24' N. Longitude 80 deg. 24' E. Elevation 1290 m. Kazakhstan, Sarkand, Village of Topolevka, Forestry Camp #16 Topolevka Forestry Area, Taldy-Kurgan region, Soldier's Gorge, Dzhungarksy Alatau, on the way back to camp; 80 m up slope towards W on NW ridge. Slope 1%. Rainfall 750-800 mm. Population size large. Surrounding plants *Rhamnus*, Box elder. Pedigree - Wild. Fruit 4.0 x 4.0 cm, round, yellow with slight green cast. Flavor very astringent, bad flavor. Fruit disease: scab. Leaf disease: scab. Tree erect habit, bearing at top of tree; few side branches.

**PI 600450. *Malus sieversii* (Ledeb.) M. Roem.**

Wild. GMAL 3553. Collected 09/13/1993 in Kazakhstan. Elevation 1380 m. Kazakhstan, Sarkand, Village of Topolevka, Forestry Camp #16 Topolevka Forestry Area, Taldy-Kurgan region, Soldier's Gorge, Dzhungarksy Alatau, less than 1 km S of campsite, W side of road. Soil moist humus. Slope 45% NW facing. Rainfall 750-800 mm. Surrounding plants *Crataegus*, *Berberis*, *Populus tremuloides*, *Fragaria*. Pedigree - Wild. Fruit Round, flat, short pedicle, red block with strip, bright carmine. Flavor acidic, aromatic, astringent, mealy, not bad flavor; early maturing, most fruit had dropped. Fruit disease: scab.

**PI 600451. *Malus sieversii* (Ledeb.) M. Roem.**

Wild. GMAL 3554. Collected 09/13/1993 in Kazakhstan. Latitude 45 deg.